Amendments to the Abstract

Please replace the paragraph at page 43, lines 2 through 16 with the following paragraph:

The present invention relates to a method for fabricating a composite gas separation module and to gas separation modules formed by the method. In one embodiment, the method for fabricating a composite gas separation module includes depositing a first material on a porous substrate, thereby forming a coated substrate. The coated substrate is abraded, thereby forming a polished substrate. A second material is then deposited on the polished substrate. The first material, the second material, or both the first material and the second material can include a gas-selective material such as a hydrogen-selective metal, e.g., palladium, or an alloy thereof. In one embodiment, the method includes the step of forming a dense gas-selective membrane over the porous substrate. The present invention also relates to a method for selectively separating hydrogen gas from a hydrogen gas-containing gaseous stream.